

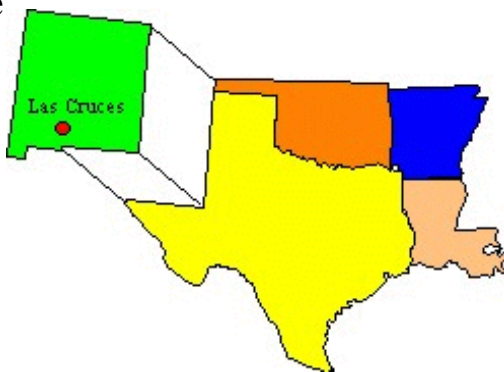
Griggs & Walnut Ground Water Plume Las Cruces, NM

EPA Region 6

EPA ID# NM0002271286

State Congressional District: 2

Updated: August 2003



SITE DESCRIPTION

Location: The site is located within the city of Las Cruces in an area approximately 2,500 feet by 4,000 feet. The effected wells range from 576 feet to 730 feet deep. The depth to water in the effected wells ranges from 102 to 250 feet.

The center of the site was taken to be the latitude, halfway between the north and south most wells and longitude halfway between the east and west most wells. The coordinates of the site are 32 degrees, 19 minutes , 08 seconds latitude and 106 degrees, 45 16 seconds.

The current boundary was defined by the New Mexico Environment Department (NMED) using ground water samples from four municipal supply wells, sixteen monitoring wells, and one private well, all meeting observed release criteria. The Safe Drinking Water Act Maximum Contaminant Level (MCL) is exceeded in one municipal supply well and 14 monitor wells. The exact extent of the plume has not yet been defined but is estimated to be 1.5 miles by 1 1/2 miles and lies within the central district of the City. The plume extends vertically from the water table to the depth of the water supply wells. To date, only dissolved-phase concentrations have been detected (no Dense, Non-Aqueous Phase Liquids, DNAPL). Dissolved PCE was detected both up-gradient and down-gradient from the affected municipal supply wells. The City supplies water to the community from 28 wells.

Population: The population of Las Cruces is approximately 83,000 individuals.

Setting: The city of Las Cruces municipal water supply utilizes a total of 28 wells to provide drinking water to the people of the city. The City's water wells are completely within the Santa Fe Group aquifer. The Santa Fe Group aquifer is a sole source aquifer for the region and produces most of the ground water used in metropolitan and industrial centers, as well as significant proportion of the ground water used to supplement surface irrigation supplies.

PRESENT STATUS AND ISSUES

- The Source Investigation Report is being finalized. This portion of the Remedial Investigation/Feasibility Study is intended to assist in identifying potential sources of the ground water contamination, and will assist in the completion of the RI/FS.
- The soil vapor survey of the site was completed in September. Eight ground water monitor wells have been installed using a multi-level system that will allow for vertical analysis areas of contamination. Ground water samples were last collected in February, 2003.
- Field activities for performing the Source Investigation portion of the Remedial Investigation/Feasibility Study have been completed.
- The site activities included soil vapor sampling, and installing monitoring wells in strategic locations for determining the source of the ground water contamination.

WASTES AND VOLUMES

Principal Pollutants:

Perchloroethylene, commonly referred to as PCE, or perc.

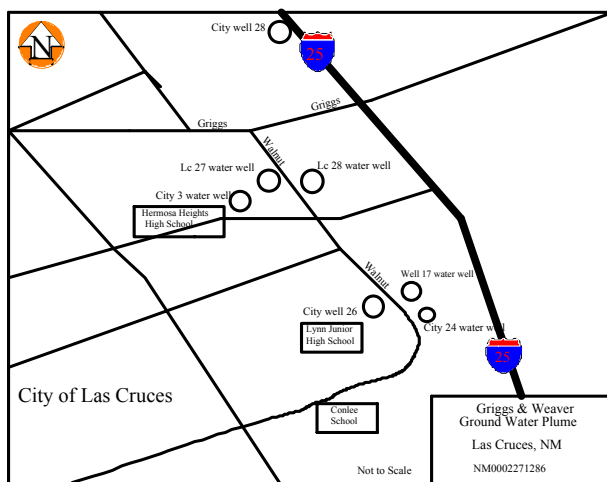
Volume:

Yet to be determined.

SITE ASSESSMENT AND RANKING

NPL Listing History
Site HRS Score: 50
Proposed Date: January 11, 2001
Final Date: June 14, 2001

SITE MAP



SITE HISTORY

The City of Las Cruces utilizes a total of 28 municipal supply wells to provide drinking water to approximately 83,000 individuals. The City of Las Cruces municipal supply wells are completed within the Santa Fe Group aquifer. The Mesilla Bolson, Santa Fe Group aquifer is a sole source aquifer for the region and produces most of the water used in metropolitan and industrial centers, as well as a significant proportion of the ground water used to supplement surface irrigation supplies. The GWP is a contaminated groundwater plume centered near the intersection of Griggs Avenue and Walnut Street in Las Cruces, Dona Ana County, New Mexico. Four municipal drinking water supply wells are currently impacted at the site, although only one, Well No. 18 (out of service since 1996), has demonstrated concentrations above MCL.

The NMED completed the Preliminary Site Assessment and installed ground water monitoring wells to determine the direction of ground water flow and horizontal extent of ground water contamination to the extent possible. The monitoring wells are 2 inches in diameter and extend only 5 to 15 feet below the water table. These wells are used only to assess ground water quality, not for water supply. Concentrations of PCE in samples from monitoring wells vary from < 0.50 to 53 ug/L. Ground water flow is currently east from the Rio Grande to the municipal wells near Interstate 25. The plume is estimated to be least 8,000 feet long, approximately 2,500 feet wide, and 100 feet thick but it is unknown if the plume is contiguous, or if additional sources or plumes exist.

HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT

A risk assessment will be performed to determine whether site contaminants pose a current or future risk to human health and the environment in the absence of any remedial action. Included in this assessment will be an identification of contaminants of concern, an assessment of exposure to those contaminants through finalization of the site conceptual model, an assessment of the toxicity of those contaminants, and a characterization of risk. This characterization will provide a basis for determining whether remedial action is necessary at the site, describe for which exposure pathways remediation is necessary, and provide justification for performance of remedial actions. Included in this assessment will be characterization of risks to both human and ecological receptors.

RECORD OF DECISION

**A RECORD OF DECISION WILL BE DEVELOPED
FOR THE GRIGGS & WALNUT AVE. PLUME SITE.**

COMMUNITY INVOLVEMENT

Community Relations Plan: 04/23/2001
Open houses and workshops: 12/12/01; 11/08/01; 04/09/02
Formal Proposed Plan Public Meeting:
Citizens on site mailing list:
Constituency Interest:
Site Repository: Thomas Branigan Library, Las Cruces, NM

TECHNICAL ASSISTANCE GRANT

Availability Notice: 01/20/01, 06/25/01
Letters of Intent Received: 07/05/01
Adrian Hanson (withdrew application 08/15/01 as academic institutions are ineligible)

Final Application Received: n/a
Grant Award: n/a

SITE CONTACTS

EPA Remedial Project Manager: Petra Sanchez, 214-665-8509
EPA Site Attorney: James Costello, 214-665-8045
EPA Community Involvement: Beverly Negri, 214-665-6658
EPA Contractor: CH2MHill, Margaret O'Hare
EPA Ombudsman: Arnold Ondarza, 303-312-6777
ATSDR: Patrick Young, 214-665-8562
New Mexico Environment Department State Contact: Dana Bahar, Program Manager, 505-827-2908

REALIZED CLEANUP BENEFITS

The water supply for 83,000 individual customers of the Las Cruces City water supply system and is presently meeting the requirements of the Safe Drinking Water Act.